

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

FIRST QUALITY TISSUE, LLC,

Plaintiff,

v.

IRVING CONSUMER PRODUCTS  
LIMITED and IRVING CONSUMER  
PRODUCTS, INC.,

Defendants.

Civil Action No. 19-cv-428-RGA

MEMORANDUM

Before the Court is the issue of claim construction of multiple terms in U.S. Patent No. 9,506,203 (“the ‘203 patent”), U.S. Patent No. 9,580,872 (“the ‘872 patent”), and U.S. Patent No. 9,725,853 (“the ‘853 patent”). The Court has considered the Parties’ Joint Claim Construction Brief. (D.I. 79). The Court heard oral argument on June 24, 2020. At the argument, I ruled on all the disputed terms except the first one – “through air dried tissue.”

**I. BACKGROUND**

Plaintiff First Quality Tissue LLC filed the instant action on March 1, 2019, alleging infringement of the ‘203, ‘872, and ‘853 patents by Defendants Irving Consumer Products Limited and Irving Consumer Products, Inc. (D.I. 1). This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338.

**II. LEGAL STANDARD**

“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal quotation marks omitted). “[T]here is no magic formula or catechism

for conducting claim construction.’ Instead, the court is free to attach the appropriate weight to appropriate sources ‘in light of the statutes and policies that inform patent law.’” *SoftView LLC v. Apple Inc.*, 2013 WL 4758195, at \*1 (D. Del. Sept. 4, 2013) (quoting *Phillips*, 415 F.3d at 1324). When construing patent claims, a court considers the literal language of the claim, the patent specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977–80 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996). Of these sources, “the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315 (internal quotation marks omitted).

“[T]he words of a claim are generally given their ordinary and customary meaning. . . . [Which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1312–13 (citations and internal quotation marks omitted). “[T]he ordinary meaning of a claim term is its meaning to [an] ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted). “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

When a court relies solely upon the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court’s construction is a determination of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). The court may also make factual findings based upon consideration of extrinsic evidence, which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony,

dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317–19 (internal quotation marks omitted). Extrinsic evidence may assist the court in understanding the underlying technology, the meaning of terms to one skilled in the art, and how the invention works. *Id.* Extrinsic evidence, however, is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.*

### III. CONSTRUCTION OF DISPUTED TERMS

#### 1. “through air dried tissue”

- a. *Plaintiff’s proposed construction*: tissue having a pattern or structure of the sort produced by a TAD fabric; not a product by-process term; preamble is limiting
- b. *Defendants’ proposed construction*: Product-by-process limitation (“through air dried”): preamble is not limiting – no patentable weight
- c. *Court’s construction*: The preamble is limiting. “Through air dried tissue” is construed as “tissue having a pattern or structure of the sort produced by a TAD fabric.” It is not a product-by-process limitation. It is entitled to patentable weight.

Plaintiff argues that “through air dried tissue,” which appears in the preamble of most of the independent claims of the patents at issue,<sup>1</sup> is more than a tissue that has undergone a process of through air drying. (D.I. 79 at 3). Plaintiff notes that while process limitations are generally not considered for purposes of patentability, if a process limitation connotes a specific structure, it is considered structural language. (D.I. 79 at 4, citing *In re Nordt Dev. Co.*, 881 F.3d 1371, 1374 (Fed. Cir. 2018)). Plaintiff explains “through air drying” is well-known by persons of ordinary skill in the art to impart a characteristic pattern or structure on the resulting tissues, which are readily distinguishable from conventional tissues. (D.I. 79 at 5-6). Plaintiff also notes

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<sup>1</sup> To wit, claim 1 of the ‘203 patent, claims 1 and 21 (but not claims 10 and 16) of the ‘872 patent, and claims 1, 4, 6, and 8 of the ‘853 patent.

that the specification expressly discusses the patterning achieved through air drying. (*Id.* at 6, citing the ‘203 patent at 5:38-42).<sup>2</sup>

Plaintiff further contends that “through air dried tissue” is limiting preamble language. (*Id.* at 7). “In general, a preamble limits the invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim.” *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (quoting *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999)). Plaintiff argues that the “the specification makes clear that the inventors were working on particular improvements to through air dried tissue and not general improvements to all tissue.” (D.I. 79 at 7). Thus, Plaintiff asserts, these words give “life and meaning” to the claimed invention. *Id.* Plaintiff also explains that in the prosecution of the grandparent of the patents-in-suit (U.S. Patent No. 8,968,517 (“the ‘517 patent”)), the “applicant specifically argued that the claims being directed to ‘through air dried tissue’ distinguished them from prior art, explaining to the Examiner that through air drying results in a structurally distinct tissue product.” (*Id.* at 9).

Defendants contend “through air dried tissue,” as recited in the preamble, is not limiting because it is unnecessary to breathe life into the claims. (*Id.* at 14). Defendants argue that while the through air dried (“TAD”) process may be structurally distinct from another process, it does not give rise to the novelty of the product. (*Id.*). The novel structure is instead created by wet end additives, not the TAD process. (*Id.* at 16). Defendants note, “The Asserted Patents describe nothing that distinguishes the wet end of a process that uses TAD from the wet end of a process that does not.” (*Id.* at 18). Overall, Defendants contend that the “TAD claim language

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<sup>2</sup> The three patents have the same specification. The parties cite only to the ‘203 specification. So do I.

refers only to a particular drying process with no specific structural connotation that affects patentability.” (*Id.* at 19).

Defendants argue that for purposes of invalidity, TAD must be construed as a product-by-process limitation because the structure imposed by the process does not give rise to the patentability. (*Id.* at 21). Defendants assert, “First Quality must identify specific structure that TAD products uniquely possess that give rise to the Claimed Surface Properties [meaning such things as ‘Average Peak to Valley Waviness,’ ‘Average Primary Amplitude,’ or ‘Amplitude Uniformity’]” to avoid being a product-by-process limitation that has no patentable weight. (*Id.* at 22). Defendants further contend that while a process may connote structure, it must impart a structure that is captured by the claims to give rise to patentable weight. (*Id.* at 24).

To counter, Plaintiff explains that the inventors successfully distinguished the prior art “on the basis that it does not disclose the very same ‘through air dried tissue’ preamble limitation at issue here.” (*Id.* at 26). Plaintiff argues that there is “no requirement that a basis for distinguishing prior art be independent of other bases for it to result in preamble language being limiting.” (*Id.* at 27). Rather, “clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention.” (*Id.* at 28, quoting *Catalina Mktg.*, 289 F.3d at 808). Thus, Plaintiff contends the term is an essential structure that gives life, meaning, and vitality to the claims. (D.I. 79 at 29). Plaintiff also argues that the “Claimed Surface Properties” are not the sole feature distinguishing the claims from the prior art. Plaintiff asserts the prior art is distinguishable based on a combination of features, including the through air dried feature. *Id.*

I agree with Plaintiff. The title of each patent-in-suit is “Soft through air dried tissue.”

Each abstract begins, “A multi-layer through air tissue . . . .” Each Summary of Invention section starts with four paragraphs, three of which refer to “through air drying.” The Background section of each specification focuses on problems that arose in the context of through air dried tissues. *See* ‘203 Patent at 1:41-45 (“While topical softeners have been used in combination with through air dried tissue, the resulting products have had a tamped down or flattened surface profile [which] hinders the cleaning ability of the tissue and limits the overall effectiveness of the softener.”). With this context, it is clear that the body of the claims with “through air dried” in the preamble are discussing “through air dried tissues,” not some other variety of tissue. Thus, the preamble language helps give “life, meaning, and vitality” to the claims.

I am also persuaded by the prosecution history of the grandfather ‘517 patent.<sup>3</sup> The history demonstrates that the inventors distinguished the prior art (“Shannon”) on the basis that the prior art did not disclose or suggest a “through air dried tissue,” which is “structurally different” from “the tissue product disclosed in Shannon.” (D.I. 79 at 26-27; *see* D.I. 80, JA45-46). “[C]lear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates

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<sup>3</sup> In response to Plaintiff’s argument on the prosecution history of the ‘517 patent, one argument that Defendants assert is that the ‘517 patent history should not apply because it involved different claims than the ones at issue here. (D.I. 79 at 37). However, the prosecution history of an ancestor patent may be relevant. *See Omega Eng’g, Inc, v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003) (prosecution history of genealogically-related patent relevant when “there is a common term in dispute”). Indeed, “we presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.” *Id.* Here, the ‘517 patent addresses a term – “through air dried tissue” – that is also in the patents-in-suit. The prosecution history is therefore relevant to the issue at hand.

use of the preamble to define, in part, the claimed invention.” *Catalina Mktg.*, 289 F.3d at 808. While the TAD feature may not have been the only basis to distinguish the product from prior art, it was nonetheless relied on to define the claimed invention. The “interested public has the right to rely on the inventor’s statements made during prosecution, without attempting to decipher whether the examiner relied on them, or how much weight they were given.” *Fenner Investments, Ltd. v. Cellco Partnership*, 778 F.3d 1320, 1323 (Fed. Cir. 2015).

The term “through air dried tissue” is not a product-by-process limitation. “If the process limitation connotes specific structure and may be considered a structural limitation, . . . that structure should be considered.” *In re Nordt*, 881 F.3d at 1374. Indeed, “words of limitation that can connote with equal force a structural characteristic of the product or a process of manufacture are commonly and by default interpreted in their structural sense, unless the patentee has demonstrated otherwise.” *Id.* at 1375. While “through air dried” is certainly a process, Plaintiff has provided evidence to demonstrate how the term connotes specific structure. During prosecution, the inventors distinguished their invention from prior art, noting that “through air dried tissue” is structurally different from a tissue product made without such a process. (D.I. 79 at 32; *see* D.I. 80 at JA45-46). “TAD tissue is generally softer, bulkier and has a better absorbency compared to conventional tissue.” *Id.* The tissue is patterned during the TAD process by a certain kind of fabric. *See* ‘203 Patent at 5:38-42. I am persuaded by Plaintiff’s argument that a person of ordinary skill in the art of tissue should be able to determine a pattern or structure produced by the TAD process. As noted by Plaintiff’s expert, the “3-dimensional topography of the TAD fabric is imparted on the web and forms a pattern in the tissue structure when it is dried.” (D.I. 80, Exh. 1, Runge Decl. at JA7). “This structure is

readily distinguishable from conventional tissue structure upon visual inspection, especially with the aid of a microscope.” *Id.*

I do not construe the term “through air dried tissue” as a product-by-process limitation. Rather, it is a structural limitation that is afforded patentable weight. *See In re Nordt*, 881 F.3d at 1375. The construction for infringement and validity is therefore the same. *See Amgen Inc. v. F. Hoffman-La Roche Ltd*, 580 F.3d 1340, 1369-70 (Fed. Cir. 2009) (describing the different analyses of infringement and validity for product-by-process limitations).

2. “through air dried”

- a. *Plaintiff’s proposed construction:* See above for “through air dried tissue,” not a product-by-process term; preamble is limiting”
- b. *Defendant’s proposed construction:* Product-by-process limitation-no patentable weight

Both parties agreed at oral argument that the construction of Term 1 would resolve this dispute. Therefore, Term 2 will not be construed separately from Term 1.

3. “lint value”

- a. *Plaintiff’s proposed construction:* Plain and ordinary meaning – ‘the amount of lint generated from a tissue product as determined with a Sutherland Rub Tester.’ The Sutherland Rub Tester uses a motor to rub a weighted felt (weighted with a four pound weight) 5 times over the stationary tissue. The Hunter Color L value is measured before and after the rub test. The difference between these two Hunter Color L values is calculated as lint.
- b. *Defendant’s proposed construction:* Indefinite; If not indefinite: lint value measured according to the following protocol: (1) Determine the Hunter color L value of a piece of black felt (2) Attach the piece of felt to a 4 lb. weight (3) Mount weighted felt on Sutherland rub Tester (4) Activate Sutherland rub tester to stroke the weighted felt over a stationary tissue sample for five strokes (5) Determine the Hunter color L value of the piece of black felt (6) Record the difference between the first and second Hunter color L values of

the piece of black felt (7) Conduct Steps 1-6 for three tissue samples (8)  
Average the differences recorded in Step 6 to obtain the lint value”

- c. *Court’s construction:* the amount of lint generated from a tissue product as determined with a Sutherland Rub Tester

As I stated at the oral argument, I adopt Plaintiff’s proposed construction for the term “lint value.”

- 4. “Average Peak to Valley Waviness”
- 5. “Average Primary Amplitude”

- a. *Plaintiff’s proposed construction:*

“Average Peak to Valley Waviness”: average peak height plus average valley depth (both taken as positive values) relative to the meanline, as computed and measured according to the procedure of the ’203 Patent at 9:31-57 [and corresponding disclosure of the other Asserted Patents]

“Average Primary Amplitude”: average distance between each roughness profile point and the meanline, as computed and measured according to the procedure of the ’203 Patent at 9:31-57 [and corresponding disclosure of the other Asserted Patents]

- b. *Defendant’s proposed construction:*

“Average Peak to Valley Waviness”: Average Peak to Valley Waviness measured using only the testing parameters recited in the Asserted Patents at col. 9:33-57 (’203 and ’872 patents); 9:29-53 (’853 patent); Indefinite if term is construed to require measuring using testing parameters not set forth in the protocol recited in the Asserted Patents at col. 9:33-57 (’203 and ’872 patents); col. 9:29-53 (’853 patent)

“Average Primary Amplitude”: Average Primary Amplitude measured using only the testing parameters recited in the Asserted Patents at col. 9:33-57 (’203 and ’872 patents); col. 9:29-53 (’853 patent); Indefinite if term is construed to require measuring using testing parameters not set forth in the protocol recited in the Asserted Patents at col. 9:33-57 (’203 and ’872 patents); col. 9:29-53 (’853 patent)

- c. *Court’s construction:*

*Average Peak to Valley Waviness:* average peak height plus average valley depth (both taken as positive values) relative to the meanline, as computed and

measured according to the procedure of the '203 Patent at 9:31-57 [and corresponding disclosure of the other Asserted Patents]

*"Average Primary Amplitude"*: average distance between each roughness profile point and the meanline, as computed and measured according to the procedure of the '203 Patent at 9:31-57 [and corresponding disclosure of the other Asserted Patents]

As I stated at the oral argument, I adopt Plaintiff's proposed construction of the terms.

6. "layer"

- a. *Plaintiff's original proposed construction:* Plain and ordinary meaning - a thickness of material laid or lying over or under another
- b. *Defendant's proposed construction:* Discrete thickness of material having a fiber composition that can be distinguished experimentally from adjacent material in the tissue
- c. *Court's construction:* a thickness of material lying over or under another

Plaintiff amended its construction during the briefing. As I stated at the oral argument, I adopt Plaintiff's amended construction of the term "layer."

The parties should within one week jointly submit a proposed order in conformity with this Memorandum.

June 30, 2020

Date

/s/ Richard G. Andrews

United States District Judge